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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,637	07/17/2000	Tim J. Vincent	CA9-1999-0046-US1	8403

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EXAMINER	
PHAN, TAM T	
ART UNIT	**PAPER NUMBER**
2144	6

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/617,637	VINCENT ET AL.	
	Examiner	Art Unit	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 July 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Amendment A, paper #5, received on 03/08/2004 has been entered into record. Claims 1-20 remain pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. The effective filing date for the subject matter defined in the pending claims in this application is 12/22/1999.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatterjee et al. (U.S. Patent Number 6,243,751), hereinafter referred to as Chatterjee, and further in view of Sayan et al. (U.S. Patent Number 6,477,569).

5. Regarding claim 1, Chatterjee disclosed a computer system for providing a gateway between a transaction manager for managing database transactions from a set of applications and a server, the computer system comprising a listener process for receiving inbound connection requests from the transaction manager (Abstract, Figures 2 & 4A, column 1 lines 60-64, column 2 lines 13-17); a set of gateway agents for

establishing connections to the transaction manager for receiving transaction requests and for establishing connections to the server (column2 lines 62-65, column 3 lines 39-55, column 4 lines 26-35); a wait queue (column 12 lines 28-35, column 14 lines 3-16); a selected gateway agent removes a logical agent and an associated inbound connection identifier from the wait queue when the selected gateway agent is available and the wait queue is non-empty (column 14 lines 41-61, column 16 lines 39-43); and for a logical agent passed by the logical agent scheduler or removed from the wait queue, the gateway agent establishes a connection to the transaction manager as defined by the associated inbound connection identifier and establishes a connection to the server to implement the logical agent (Figures 4A & 8-9, column 14 lines 41-61, column 19 lines 48-54).

6. Chatterjee suggested exploration of art and/or provided a reason to modify the computer system with the logical agent scheduler feature (column 1 lines 46-53, column 14 lines 1-16, lines 41-58, column 16 lines 39-43).

7. Chatterjee did not specifically disclose a logical agent scheduler for managing sets of logical agents, a logical agent comprising data representing a connected application from the transaction manager, each logical agent having an associated inbound connection identifier, whereby the logical agent scheduler passes a selected logical agent and an associated inbound connection identifier to an available gateway agent and where the gateway has no available gateway agent, providing the logical agent and the associated inbound connection identifier to the wait queue.

8. However, in an analogous art, Sayan disclosed a logical agent scheduler for managing sets of logical agents, a logical agent comprising data representing a connected application from the transaction manager, each logical agent having an associated inbound connection identifier (Figures 12-16, column 5 lines 33-41), whereby the logical agent scheduler passes a selected logical agent and an associated inbound connection identifier to an available gateway agent and where the gateway has no available gateway agent, providing the logical agent and the associated inbound connection identifier to the wait queue (Figures 12-16).

9. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the computer system of Chatterjee with the teachings of Sayan to include the logical agent scheduler in order to manage and regulate the logical ports in the transaction process (Sayan, column 3 lines 7-14) since the transaction request could be prioritized with respect to other requests (Sayan, column 1 lines 46-50). All transactions require resources and these resources might be needlessly tied up, thus would reduce resources available to a more prioritize transaction (Chatterjee, column 2 lines 63-67, column 3 lines 1-24).

10. Regarding claim 2, Chatterjee disclosed a computer system in which the gateway implements tightly coupled XA transactions from the set of applications by dedicating a single gateway agent to any given tightly coupled XA transaction, the listener process, the logical agent scheduler and the gateway agents passing logical agents to gateway agents such that any logical agent representing a transaction in that given tightly coupled XA transaction will be executed by a given gateway agent dedicated to that

given tightly coupled XA transaction (column 1 lines 31-40, column 3 lines 25-35, lines 39-55, column 4 lines 22-36).

11. Regarding claim 3, Sayan disclosed a computer system further comprising a free agent list indicating which gateway agents are available for connection to the transaction manager which are not dedicated to any given tightly coupled XA transaction (Figures 12-16).

12. Regarding claim 4, Sayan disclosed a computer system implemented in a UNIX-based environment in which the connections to the transaction manager are TCP/IP socket pairs and in which the passing of logical agents and associated inbound connection endpoint identifiers is implemented by the use of domain socket pairs in the gateway (Figures 15-16, column 5 lines 33-42).

13. Regarding claim 5, Sayan disclosed a computer system in which the wait queue is implemented as a domain socket pair in the gateway (Figure 16, column 12 lines 28-35).

14. Regarding claim 6, Sayan disclosed a computer system in which domain sockets are assigned such that the logical agent scheduler has a domain socket pair dedicated for receiving logical agent and associated inbound connection pairs from the gateway agents and the listener process, and the domain socket pairs for other communication in the gateway are obtained from a pool of domain sockets (Figures 12-16, column 5 lines 22-41); Chatterjee disclosed a computer system whereby in the case that no domain socket pair is available in the domain socket pool for transfer of' a logical agent and associated inbound connection pair the logical agent scheduler will place the logical

agent and associated inbound connection pair in the domain socket pair which implements the wait queue (Figure 4A, column 14 lines 41-58).

15. Regarding claim 7, Sayan disclosed a computer system a gateway for demultiplexing connections from a first system to a second system (Figure 16). Chatterjee disclosed the gateway comprising internal processes which are selectively connected to implement the demultiplexing function of the gateway (Figure 4A), the gateway comprising a wait queue, the wait queue providing a buffering function for both the connections between the first system and the second system and for the connections between the internal processes (column 4 lines 22-35, column 12 lines 28-39, column 14 lines 3-15).

16. Regarding claim 8, Sayan disclosed a gateway in which the connections between the first system and the second system are TCP/IP socket pairs and the connections between the internal processes are domain socket pairs (Figure 16, column 5 lines 32-42).

17. Regarding claim 9, the teachings of Sayan and Chatterjee disclosed a gateway in which the wait queue (Chatterjee, column 14 lines 3-16) is implemented by a domain socket pair (Sayan, Figure 16 column 5 lines 32-42).

18. Regarding claim 10, The teachings of Sayan and Chatterjee disclosed a computer system for demultiplexing a set of TCP/IP inbound connections to a set of outbound connections, the computer system comprising a plurality of scheduler processes for providing TCP/IP inbound connections to agent processes for establishing corresponding outbound connections (Sayan Figures 1 & 12-16, column 5

lines 32-42), the scheduler processes and the agent processes communicating by domain socket pairs in the computer system, each scheduler process having a dedicated domain socket pair for receiving a TCP/IP inbound connection endpoint, the domain socket pairs for communication to the agent processes being available from a pool of domain sockets (Sayan, Figures 1 & 12-16; Chatterjee, Figures 7-9).

19. Regarding claim 11, The teachings of Chatterjee and Sayan disclosed a computer system comprising a wait queue implemented as a domain socket pair, the wait queue receiving a TCP/IP inbound connection endpoint where no agent process is available for implementing the TCP/IP inbound connection and from which non-empty wait queue an available agent process will remove a TCP/IP inbound connection endpoint to establish a TCP/IP inbound connection and an outbound connection (Chatterjee, column 14 lines 3-16; Sayan, Figure 16, column 5 lines 32-42).

20. Regarding claims 12-15, the limitations of these claims correspond directly to the computer system of claims 1-3, and thus these claims are rejected using the same rationale.

21. Regarding claims 16-18, the limitations of these claims correspond directly to the gateway of claims 7-9, and thus these claims are rejected using the same rationale.

22. Regarding claims 19-20, the limitations of these claims correspond directly to the computer system of claims 10-11, and thus these claims are rejected using the same rationale.

23. Since all the limitations of the claimed invention were disclosed by the combination of Chatterjee and Sayan, claims 1-20 are rejected.

Response to Arguments

24. Applicant's arguments filed 03/08/2004 have been fully considered but they are not persuasive.

25. Applicants' response to the combined applications of Chatterjee et al. and Sayan et al. in Amendment A, paper #5, filed 03/08/2004, argued that "there is no reason to combine the cited art". It is submitted that the evidence that there is a teaching, motivation, and suggestion to combine the two cited references as is detailed in the above rejection. In addition, there are logical reasons that would motivate one of ordinary skill in the art to combine the two cited references in order to prioritize transaction request (refer to the above rejection for complete details). As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (703) 305-9705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Jack Harvey
SPE
Art Unit 2142
703-305-9705

tp
March 31, 2004

JACK B. HARVEY
SUPERVISORY PATENT EXAMINER